



## Terms & Definitions

<b>ACH</b>	Air Changes Per Hour: How many times the air filling a space is conditioned and or filtered with local HVAC equipment
<b>TOTAL ACH</b>	Total air changes per hour of each room including air purifying unit
<b>VOLUME</b>	Amount of space filled with air
<b>CFM</b>	Cubic feet per minute
<b>READING TYPE</b>	Testing equipment used to take CFM readings
<b>AP</b>	Air purifying unit
<b>UV</b>	Unit ventilator
<b>AHU</b>	Air handling unit
<b>MWR</b>	Medical waiting room (next to room number on each sheet)

### Notes:

#### Causes for low flow:

- Weak fan motor
- Dirty filter
- Bearings need oil
- Loose belt
- Weak speed transformer
- Dirty coil
- Blocked return
- Interrupted Damper Operation



**Site:** Bridge Street School  
**Date:** 9/9/2020

**Technician:** Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
101	25	36	9	8100	825	UV	Hood	6.11			
103	38	40	9	13680	975	UV	Hood	4.28			
104	30	14	9	3780	426	UV	Hood	6.76			
105	40	30	9	10800	1022	UV	Hood	5.68			
108	16	40	9	5760	960	UV	Hood	10.00			
109	30	30	9	8100	810	UV	Hood	6.00			
110	30	30	9	8100	741	UV	Hood	5.49			
111	31	30	9	8370	959	UV	Hood	6.87			
112	31	30	9	8370	629	UV	Hood	4.51			
114	31	30	9	8370	704	UV	Hood	5.05			
201	24	28	11	7392	840	UV	Hood	6.82			
202	24	30	11	7920	786	UV	Hood	5.95			
203	24	28	11	7392	792	UV	Hood	6.43			
205	24	30	11	7920	723	UV	Hood	5.48	27		
206	24	30	11	7920	715	UV	Hood	5.42			
207	24	30	11	7920	751	UV	Hood	5.69			
208	24	30	11	7920	515	UV	Hood	3.90	15		
208	24	30	11	7920	768	UV	Hood	5.82			
220	28	15	8.5	3570	580	UV	Hood	9.75			
221	24	15	9	3240	474	UV	Hood	8.78			
222	24	15	9	3240	510	UV	Hood	9.44			
223	24	15	9	3240	608	UV	Hood	11.26			
301	24	30	11	7920	820	UV	Hood	6.21			
302	24	30	11	7920	710	UV	Hood	5.38			
303	24	30	11	7920	735	UV	Hood	5.57			
305	24	30	11	7920	747	UV	Hood	5.66			
306	24	30	11	7920	796	UV	Hood	6.03			
307	24	30	11	7920	746	UV	Hood	5.65			
308	24	30	11	7920	782	UV	Hood	5.92			
Admin	refer to notes		8	6644	953	AHU	Hood	8.61			irregular room shape. Measured and totaled.
Art	31	30	9	8370	664	UV	Hood	4.76			
Library	39	62	9	21762	4064	AHU	Hood	11.20			



**Site:** Jackson Street School  
**Date:** 9/9/2020

**Technician:** Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
101	36	32	8	9216	551	UV	Hood	3.59	247		
102	32	35	8	8960	450	UV	Hood	3.01	239		
103	31	39	12	14508	503	UV	Hood	2.08	347		
104	31	39	12	14508	456	UV	Hood	1.89	288		
105	31	40	19	23560	526	UV	Hood	1.34	345		
106	31	39	13	15717	577	UV	Hood	2.20	215		
107	31	40	19	23560	447	UV	Hood	1.14	261		
108	36	32	9	10368	648	UV	Hood	3.75			
109	30	30	9	8100	390	UV	Hood	2.89			
110	30	28	9	7560	559	UV	Hood	4.44			
111	30	29	9	7830	466	UV	Hood	3.57			
112	30	28	9	7560	447	UV	Hood	3.55			
113	30	28	9	7560	585	UV	Hood	4.64			
114	30	29	9	7830	1023	UV	Hood	7.84			
115	30	29	9	7830	555	UV	Hood	4.25			
116	30	29	9	7830	878	UV	Hood	6.73			
119	NA	NA	NA	NA	NA	NA	NA	NA			Radiant heat only. No air to be tested.
121	NA	NA	NA	NA	NA	NA	NA	NA			Radiant heat only. No air to be tested.
122	24	40	19	18240	490	UV	Hood	1.61			
123	NA	NA	NA	NA	NA	NA	NA	NA			Radiant heat only. No air to be tested.
124	NA	NA	NA	NA	NA	NA	NA	NA			Radiant heat only. No air to be tested.
126	11	20	8	1760	121	UV	Hood	4.13			
128	15	23	8	2760	92	UV	Hood	2.00			
201	30	29	9	7830	201	UV	Hood	1.54			
202	30	30	9	8100	948	UV	Hood	7.02			
203	30	30	9	8100	186	UV	Hood	1.38			
204	30	30	9	8100	517	UV	Hood	3.83			
205	30	30	9	8100	360	UV	Hood	2.67			
206	30	30	9	8100	612	UV	Hood	4.53			
207	30	30	9	8100	323	UV	Hood	2.39			
208	30	30	9	8100	537	UV	Hood	3.98			
209	30	30	9	8100	1063	UV	Hood	7.87			
210	30	30	9	8100	478	UV	Hood	3.54			
211	30	30	9	8100	501	UV	Hood	3.71			
212	30	30	9	8100	426	UV	Hood	3.16			

Relax Room	7	11	8	616		UV	Hood	0.00	157	no supply, exhaust only
Teach Dining	24	27	19	12312		UV	Hood	0.00		
Reception	irregular shaped room		9.5	3071	565	UV	Hood	11.04		
Principal	11	20	9.5	2090	205	UV	Hood	5.89		
Conference	14	16	9.5	2128	253	UV	Hood	7.13		
Admin Asst	11	12	9.5	1254	108	UV	Hood	5.17		
Nurse	NA	NA	NA	NA	NA	NA	NA	NA		Radiant heat only. No air to be tested.



Site: Ryan Road School  
Date: 9/9/2020

Technician: Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
1	31	28	9	7812	335	UV	Hood	2.57			
2	27	29	9	7047	285	UV	Hood	2.43			
3	28	27	9	6804	202	UV	Hood	1.78			
4	28	27	9	6804	390	UV	Hood	3.44			
5	31	27	9	7533	566	UV	Hood	4.51			
6	29	27	9	7047	423	UV	Hood	3.60			
7	29	30	9	7830	393	AHU	Hood	3.01		91	
8	29	31	9	8091	371	AHU	Hood	2.75		170	
9	28	30	9	7560	392	UV	Hood	3.11			
10	28	31	9	7812	330	UV	Hood	2.53			
11	25	30	9	6750	452	UV	Hood	4.02			
12	28	30	9	7560	420	UV	Hood	3.33			
13	28	29	9	7308	457	UV	Hood	3.75			
14	28	30	9	7560	420	UV	Hood	3.33			
15	28	30	9	7560	533	UV	Hood	4.23			
16	28	30	9	7560	560	UV	Hood	4.44			
17	28	30	9	7560	521	UV	Hood	4.13			
18	28	30	9	7560	561	UV	Hood	4.45			
19	28	30	9	7560	387	UV	Hood	3.07			
20	28	30	9	7560	600	UV	Hood	4.76			
Nurse	8	13	9	936	564	UV	Hood	36.15			
Resorce Rm 1	20	27	9	4860	365	UV	Hood	4.51			
Resorce Rm 3	20	27	9	4860	456	UV	Hood	5.63	496		
Sped Rm 2	28	22	9	5544	465	UV	Hood	5.03			
Sped Rm 4	28	22	9	5544	550	UV	Hood	5.95	86		
Library	60	45	12	32400	1600	UV	Hood	2.96			
K1	40	30	9	8891	322	UV	Hood	2.17			
Guidance Offi	12	17	8.5	1734	367	UV	Hood	12.70			
Copy Room	13	11	8.5	1215.5	368	UV	Hood	18.17			
Reception	irregular shaped room		8.5	1232.5	369	UV	Hood	17.96			Sectioned and measured room.
Rear Admin	9	10	8.5	765	370	UV	Hood	29.02			
Principal	9.5	12	8.5	969	371	UV	Hood	22.97			



Site: Leeds School  
Date: 9/9/2020

Technician: Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
109	31	30	9	8370	625	UV	Hood	4.48	206		
110	25	12	9	2700	821	UV	Hood	18.24	184		
111	31	17	9	4743	767	UV	Hood	9.70	175		
112a	17	30	8	4080	631	UV	Hood	9.28	0	125	
112a	17	30	8	4080	156	UV	Hood	2.29	49		
112b	9	9	8	648	42	UV	Hood	3.89	188		
113a	10	9	8	720	59	UV	Hood	4.92	na	119	
113b	15	20	8	2400	101	UV	Hood	2.53	na	37	
113b	15	20	8	2400	460	UV	Hood	11.50	na	124	
113c	13	22	8	2288	120	UV	Hood	3.15	na	44	
113d	13	10	8	1040	56	UV	Hood	3.23	45		
114a	12	30	8	2880	0	UV	Hood	0.00	159		
114a	12	30	8	2880	125	UV	Hood	2.60	25		pneumatic air leak in uv
114b	22	14	8	2464	750	UV	Hood	18.26	25		
114b	22	14	8	2464	105	UV	Hood	2.56	na	44	
114c	9	9	8	648	40	UV	Hood	3.70			
1	40	33	11	14520	537	UV	Hood	2.22	242		
2	40	28	11	12320	852	UV	Hood	4.15	305		
3	40	32	11	14080	774	UV	Hood	3.30	149		
4	40	32	9	11520	206	UV	Hood	1.07		127	
105	25	30	9	6750	1648	UV	Hood	14.65	106		
106	25	20	9	4500	710	UV	Hood	9.47	289		
107	32	30	9	8640	591	UV	Hood	4.10	246		
108	24	26	9	5616	570	UV	Hood	6.09	138		
201	26	34	10	8840	500	UV	Hood	3.39			
202	28	30	10	8400	233	UV	Hood	1.66			
203	28	30	10	8400	363	UV	Hood	2.59			
204	25	31	10	7750	590	UV	Hood	4.57			
205	28	31	10	8680	751	UV	Hood	5.19			
206	28	31	10	8680	500	UV	Hood	3.46			
207	28	31	10	8680	511	UV	Hood	3.53			
208	28	31	10	8680	375	UV	Hood	2.59			
209	28	31	10	8680	715	UV	Hood	4.94			
210	30	25	10	7500	688	UV	Hood	5.50			
211	30	20	10	6000	609	UV	Hood	6.09			

212	38	25	10	9500	714	UV	Hood	4.51	359	
213	32	30	10	9600	742	UV	Hood	4.64	286	
214	32	30	10	9600	769	UV	Hood	4.81	351	
215	31	17	10	5270	694	UV	Hood	7.90	277	
216	33	32	10	10560	745	UV	Hood	4.23	251	
217	33	32	10	10560	822	UV	Hood	4.67	389	
Admin Office			8	5040	917	AHU	Hood	10.92	643	Placed AHU in HAND at 60hz
Clark Office			8	4216		AHU	Hood	0.00		AHU not running. Contacted HVAC dept.
Gymnasium	75	50	19	71250	6187	AHU	Hood	5.21	1460	
Nurse Office	irregular shaped room		8	3616	526	AHU	Hood	8.73		Sectioned room and measured



Site: High School  
Date: 9/9/2020

Technician: Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
104	30	27	9	7290	471	UV	Hood	3.88			
106	30	23	9	6210	839	UV	Hood	8.11	0		
108	24	32	9	6912	856	UV	Hood	7.43	820		
109	21	22	9	4158	735	UV	Hood	10.61	0		
110	24	29	9	6264	724	UV	Hood	6.93	535		
112	26	15	9	3510	853	UV	Hood	14.58	0		
114	25	16	9	3600	912	UV	Hood	15.20	374		
116	21	38	9	7182	425	UV	Hood	3.55		1077	
200	30	43	9	11610	1965	UV	Hood	10.16		645	
201	48	32	9	13824	1215	UV	Hood	5.27		294	
202	30	43	9	11610	2101	AHU	Hood	10.86		0	Return no reading
207	refer to notes			2940	589	AHU	Hood	12.02			Sectioned out room to calculate proper volume
208	20	30	9	5400	691	UV	Hood	7.68	242		
209	25	15	9	3375	890	UV	Hood	15.82	255		
210	24	230	9	49680	718	UV	Hood	0.87	371		
211	21	29	9	5481	502	AHU	Hood	5.50			
212	24	16	9	3456	614	UV	Hood	10.66			
213	22	21	9	4158	490	UV	Hood	7.07		15	
214	21	42	9	7938	443	AHU	Hood	3.35		217	
215	30	35	9	9450	1331	UV	Hood	8.45		668	No Return, Exhaust Not Running
216	22	30	9	5940	704	UV	Hood	7.11	177		
218	22	30	9	5940	738	UV	Hood	7.45	545		
220	22	30	9	5940	583	UV	Hood	5.89	200		
222	31	35	9	9765	153	UV	Hood	0.94		127	
224	30	30	9	8100	1264	UV	Hood	9.36		541	
226	30	31	9	8370	1250	UV	Hood	8.96			
307	refer to notes			804	239	UV	Hood	17.84			Sectioned out room to calculate proper volume
310	23	42	9	8694	417	UV	Hood	2.88		947	
318	57	18	12	12312	879	UV	Hood	4.28		683	
320	55	25	9	12375	1745	UV	Hood	8.46		1450	
322	55	26	9	12870	1644	UV	Hood	7.66		1332	
330	14	14	9	1764	496	UV	Hood	16.87		414	
202 Prep.	19	16	9	2736	500	UV	Hood	10.96			
215 Prep	19	16	9	2736	448	UV	Hood	9.82			
224 Prep.	16	16	9	2304	204	UV	Hood	5.31	485		



100	24	23	9	4968	966	UV	Hood	11.67	
102	30	27	9	7290	721	UV	Hood	5.93	
109	21	22	9	4158	735	UV	Hood	10.61	
113	17	12	10	2040	77	UV	Hood	2.26	60
115	31	27	9	7533	782	UV	Hood	6.23	
117	31	23	9	6417	909	UV	Hood	8.50	
118	31	23	9	6417	960	UV	Hood	8.98	
120	32	23	9	6624	686	UV	Hood	6.21	
122	32	23	9	6624	954	UV	Hood	8.64	
126	31	15	9	4185	783	UV	Hood	11.23	
128	31	30	9	8370	961	UV	Hood	6.89	
204	24	24	9	5184	540	UV	Hood	6.25	897
205	24	27	9	5832	679	UV	Hood	6.99	906
206	24	20	9	4320	662	UV	Hood	9.19	
208	20	30	9	5400	639	UV	Hood	7.10	304
210	24	30	9	6480	544	UV	Hood	5.04	175
216	24	30	9	6480	667	UV	Hood	6.18	
218	22	30	9	5940	693	UV	Hood	7.00	590
220	22	30	9	5940	797	UV	Hood	8.05	313
300	25	25	9	5625	711	UV	Hood	7.58	600
302	24	31	9	6696	797	UV	Hood	7.14	
303	24	32	9	6912	701	UV	Hood	6.09	941
304	24	28	9	6048	609	UV	Hood	6.04	255
305	24	35	9	7560	980	UV	Hood	7.78	116
306	24	25	9	5400	655	UV	Hood	7.28	414
308	22	25	9	4950	913	UV	Hood	11.07	
309	22	27	9	5346	655	UV	Hood	7.35	660
312	22	23	9	4554	872	UV	Hood	11.49	375
314	22	27	9	5346	814	UV	Hood	9.14	335
316	22	29	9	5742	815	UV	Hood	8.52	392
Band	41	60	15	36900	2216	UV	Hood	3.60	1592
G10	30	39	9	10530	1278	UV	Hood	7.28	
G11	32	40	9	11520	954	UV	Hood	4.97	Wall linear diffuser read +53
G12	refer to	notes	9	8028	538	UV	Hood	4.02	Room sectioned out for proper volume calculation. Wall grill +41 cfm
G14	30	31	9	8370	1160	UV	Hood	8.32	
G16	32	61	9	17568	1842	UV	Hood	6.29	Wall linear diffuser read +41
G18	61	30	12	21960	403	UV	Hood	1.10	Coil/filter clogged? (woodshop)
IPS 203	24	27	9	5832	847	UV	Hood	8.71	853
Music	35	24	10.5	8820	1246	UV	Hood	8.48	806
Nurse	refer to	notes	8	4976	368	AHU	Hood	4.44	244 Sectioned out room to calculate proper volume



Site: JFK Middle School  
Date: 9/9/2020

Technician: Ben Cenedella, Josh Sprague

Room No.	Length	Width	Height	Volume	CFM	Equip Type	Reading Type	ACH	Ex CFM	Ret CFM	Notes
101	17	30	8	4080	722	AHU	Hood	10.62	96	197	
102	30	18.75	8	4500	651	AHU	Hood	8.68		123	
103	25	32	9	7200	684	UV	Hood	5.70	173		
104	13	30	8	3120	565	UV	Hood	10.87	81		
105	30	32	9	8640	991	UV	Hood	6.88	222		
106	30	32	9	8640	836	UV	Hood	5.81			
108	31	40	9	11160	0	UV	Hood	0.00	1206		UV not running due to EMS update
109	31	40	9	11160	1106	UV	Hood	5.95	445		
110	32	40	9	11520	641	UV	Hood	3.34	800		
111	28	56	9	14112	1051	UV	Hood	4.47	26		
112	32	40	9	11520	669	UV	Hood	3.48	0		
113	28	20	9	5040	728	UV	Hood	8.67	197		
114	48	26	9	11232	0	UV	Hood	0.00	161		UV not running due to EMS update
115	18	25	9	4050	322	UV	Hood	4.77	104		
116	28	26	9	6552	699	UV	Hood	6.40	249	422	
117	27	32	9	7776	0	UV	Hood	0.00	465		UV not running due to EMS update
118	28	32	9	8064	453	UV	Hood	3.37			no exhaust in room
119	27	32	9	7776	0	UV	Hood	0.00	275		UV not running due to EMS update
120	28	32	9	8064	770	UV	Hood	5.73	209		
121	27	30	9	7290	733	UV	Hood	6.03	270		
122	27	31	9	7533	705	UV	Hood	5.62	0		
123	refer to notes		14	10,000	823	AHU	Hood	4.94	83		
124	24	35	9	7560	842	UV	Hood	6.68	376		
125	24	36	9	7776	721	UV	Hood	5.56	100		
126	26	36	9	8424	813	UV	Hood	5.79	182		
127	27	43	9	10449	1100	UV	Hood	6.32	173		
128	27	35	9	8505	805	UV	Hood	5.68	56		
129	28	31	9	7812	735	UV	Hood	5.65	50		
144	18	16	8	2,304	190	AHU	Hood	4.95	84		
201	31	29	8	7192	722	AHU	Hood	6.02	1072		
202	39	31	8	9672	576	AHU	Hood	3.57	625		
203	27	31	8	6696	1206	AHU	Hood	10.81	784		
204	37	31	8	9176	1097	UV	Hood	7.17	466		
205	27	31	8	6696	965	AHU	Hood	8.65	845		
206	38	32	8	9728	970	UV	Hood	5.98	495		

207	20	31	8	4960	506	AHU	Hood	6.12	578		
208	27	30	8	6480	835	AHU	Hood	7.73	700		
209	29	25	8	5800	451	AHU	Hood	4.67	682		
210	31	27	8	6696	1093	AHU	Hood	9.79	581		
211	38	32	8	9728	661	UV	Hood	4.08	210		
212	31	27	8	6696	737	UV	Hood	6.60	27		
213	32	27	8	6912	668	UV	Hood	5.80	135		
214	28	31	8	6944	602	UV	Hood	5.20	111		
215	18	31	8	4464	760	UV	Hood	10.22	116		
216	32	25	8	6400	623	UV	Hood	5.84	44		
217	31	25	8	6200	664	UV	Hood	6.43	0		
218	32	26	8	6656	944	UV	Hood	8.51	507		
219	48	27	8	10368	857	UV	Hood	4.96	293		
220	45	27	8	9720	1038	UV	Hood	6.41	150		
221	32	25	8	6400	622	UV	Hood	5.83	could not access exhaust due to cabinet		
222	31	26	8	6448	701	UV	Hood	6.52	147		
223	31	35	8	8680	734	UV	Hood	5.07	0		
224	31	25	8	6200	725	UV	Hood	7.02	0		
225	22	11	8	1936	273	AHU	Hood	8.46	127		
226	16	26	8	3328	763	AHU	Hood	13.76	252		
227	14	28	8	3136	629	AHU	Hood	12.03	126		
228	18	27	8	3888	23	AHU	Hood	0.35	377		
229	15	27	8	3240	754	AHU	Hood	13.96	459		
107a	32	33	8	8448	958	AHU	Hood	6.80		1400	
107b	32	35	8.125	9100	958	AHU	Hood	6.32		1469	
Admin	refer to notes			10,912	1237	AHU	Hood	6.80	85	885	Sectioned room to measure and determine volume
Band Rehearsal	30	48	18	25920	627	AHU	Hood	1.45	48	78	
Chorus Rm	30	40	18	21600	756	UV	Hood	2.10	36		
Nurse	refer to notes			8,560	765	AHU	Hood	5.36	86	190	Sectioned room to measure and determine volume